**PATENT** 

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application. Applicants have submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts

and/or double bracketing.

Listing of Claims:

1. (Currently Amended) A method for creating drill links in a report,

comprising:

accessing a relational abstraction of a data store, the relational abstraction including a plurality of views, scalar or aggregate fields associated with the views, relations between the views, and a metadata layer that includes one or more objects that contain properties describing the data store, the views, the fields, and the relations,

wherein the metadata layer is separate from the views;

receiving an indication from a user of a base view from among one or more views

in the relational abstraction; and

providing a user interface for the user creating a customized report that includes at

least one drill link,

wherein creating the customized report comprises

presenting to the user a selection including only fields constrained by the

base view based upon the one or more objects in the metadata layer, and

providing the at least one drill link on a field constrained by the metadata

layer of the relational abstraction based upon a relation path from the base view

determined from the one or more objects in the metadata layer.

2. (Canceled)

3. (Previously Presented) A method of claim 1 wherein the report is in

a HyperText Markup Language (HTML)\_format.

Type of Response: Amendment Application Number: 10/765,232

Attorney Docket Number: 310480.01

Filing Date: 01/26/2004

- 4. (Previously Presented) A method of claim 1 wherein the report is in a Dynamic HyperText Markup Language (DHTML) format.
- 5. (Previously Presented) A method of claim 1 wherein the report is in an eXtensible Markup Language (XML) format.
- 6. (Previously Presented) A method of claim 1 wherein the report is in a Portable Document Format (PDF) format.
- 7. (Previously Presented) A method of claim 1 wherein the report is in a Scalable Vector Graphics (SVG) format.
  - 8. (Canceled)
- 9. (Previously Presented) A method of claim 1 wherein the drill link includes a reference to a second report.
  - 10. (Canceled).
  - 11. (Canceled)
  - 12. (Canceled)
  - 13. (Canceled)
  - 14. (Canceled)
  - 15. (Canceled)
  - 16. (Canceled)
  - 17. (Canceled)
- 18. (Previously Presented) A method of claim 1 wherein the drill link includes a reference to an object that is based upon at least one relational abstraction object having a base view that is a destination view of a relation in the relation path.
- 19. (Original) A method of claim 18 wherein the reference is to a report template.
- 20. (Original) A method of claim 18 wherein the reference is to an expression.
- 21. (Currently Amended) A method for following drill links in a report comprising:

accessing a relational abstraction of a data store, the relational abstraction including a plurality of views, scalar or aggregate fields associated with the views,

Type of Response: Amendment Application Number: 10/765,232 Attorney Docket Number: 310480.01 Filing Date: 01/26/2004

**PATENT** 

relations between the views, and a metadata layer having one or more objects that contain properties describing the data store, the views, the fields, and the relations, wherein the metadata layer is separate from the views;

providing a user interface for creating a first report containing at least one drill link, wherein creating the first report comprises including only fields constrained by a base view in the relational abstraction based upon the one or more objects in the metadata layer, and providing the at least one drill link on a field constrained by the metadata layer of the relational abstraction based upon a relation path from the base view determined from the one or more objects in the metadata layer;

upon selection of a drill link in the first report, extracting information associated with the drill link; and

generating a second report using the extracted information.

- 22. (Canceled)
- 23. (Canceled)
- 24. (Original) A method of 21 wherein the extracted information includes a reference to an expression.
- 25. (Original) A method of 21 wherein the extracted information includes a reference to a report template.
- 26. (Original) A method of 21 wherein the extracted information includes a reference to another report.
- 27. (Original) A method of claim 25 wherein a plurality of templates are displayed for user selection.
- 28. (Original) A method of 21 wherein extracted information includes a reference to a relation.
- 29. (Original) A method of claim 21 wherein the extracted information includes a reference to the first report.
- 30. (Original) A method of claim 21 wherein the extracted information includes a reference to a dynamic web page for the second report.
- 31. (Previously Presented) A method of claim 21 wherein the extracted information includes a reference to a context of the drill link within the first report.

Type of Response: Amendment Application Number: 10/765,232 Attorney Docket Number: 310480.01

**PATENT** 

- 32. (Original) A method of claim 21 wherein the extracted information includes a reference to grouping key values identifying a particular value within the report.
- 33. (Original) A method of claim 21 wherein the extracted information is used to apply a filter on the second report.
- 34. (Currently Amended) A computer system for creating drill links in a report, the system comprising:
- a) means for accessing a relational abstraction of a data store, the relational abstraction including a plurality of views, scalar or aggregate fields associated with the views, relations between the views, and a metadata layer that includes one or more objects that contain properties describing the data store, the views, the fields, and the relation, wherein the metadata layer is separate from the views; and
- b) means for providing a user interface for creating a report that includes at least one drill link, wherein the means for providing a user interface for creating a report comprises (i) means for including only fields constrained by a base view in the relational abstraction <u>based upon the one or more objects in the metadata layer</u>, and (ii) means for providing the at least one drill link only on a field constrained by the metadata layer of the relational abstraction based upon a relation path from the base view <u>determined from the one or more objects in the metadata layer</u>.
- 35. (Currently Amended) A computer system for following drill links in a report, the system comprising:
- a) means for accessing a relational abstraction of a data store, the relational abstraction including a plurality of views, scalar or aggregate fields associated with the views, relations between the views, and a metadata layer that includes one or more objects that contain properties describing the data store, the views, the fields, and the relation, wherein the metadata layer is separate from the views;
- b) means for providing a user interface for creating a first report containing at least one drill link, wherein the means for providing a user interface for creating a first report comprises (i) means for including only fields constrained by a base view in the relational abstraction <u>based upon the one or more objects in the metadata layer</u>, and (ii)

Type of Response: Amendment Application Number: 10/765,232 Attorney Docket Number: 310480.01

Filing Date: 01/26/2004

means for providing the at least one drill link only on a field constrained by the metadata layer of the relational abstraction based upon a relation path from the base view determined from the one or more objects in the metadata layer;

- c) upon selection of the drill link, means for extracting the information associated with the drill link; and
  - d) means for generating a second report using the extracted information.
  - 36. (Canceled)
  - 37. (Canceled)

Type of Response: Amendment Application Number: 10/765,232 Attorney Docket Number: 310480.01

Filing Date: 01/26/2004